## I. List: 205.601 Synthetic substances allowed for use in organic crop production

## II. Category Use

(j): As plant or soil amendments

**III.** Committee Summary: Many commentators requested to keep humic acids on the National List. Two specific comments expressed concern about losing their ability to use water extracted humic acids in their products that they make and sell to growers. They were concerned that their water extracted humic acid material would be dropped from the List along with the alkali extracted versions. This would not be the case, since a true "water-extracted humic acid" from a natural source with no synthetic ingredients added would by definition be allowed and would not need to be on the List.

The NOSB deferred the vote (Nov.2005) on humic acids- naturally occurring deposits, water and alkali extracts only- until further information is obtained concerning the availability of water extracted humic acids (a wholly natural substitute). A Technical Evaluation Report was provided to the NOP/NOSB in order to arrive at an appropriate recommendation. The Report described the manufacturing process of alkali extracted humic/fulvic acids as well as the uses and benefits of the substances. The Report gave no evidence of any harmful or adverse effects to the environment, agro-ecosystem, or human health. No water extracted humic acid materials were described in the report. Search of the scientific literature on humic acid and comments elicited from four separate humic acid producers suggests that leonardite coal (typically used to make humic acids) will not solubilize in water to any significant degree without adding the alkali materials for extraction purposes.

Subsequent Crops Committee contact was made with the commentators mentioned above to seek more information on their water extracted product. The Colorado producer of water extracted humic acid explained that their product is extracted from peat. When asked about the humic acid content of their product, they provided analytical lab test results of the material. Unfortunately, the submitted lab result document did not contain any statement as to the humic or fulvic acid content of the material, but merely listed the fertilizer content (NPK, etc.). When asked about the absent data, the producer said they have not been testing for humic or fulvic acids but only plant food content. This producer further explained that the humic/fulvic acid material they extract is marketed as a blended component of several products that also include as ingredients other materials such as glucose and enzymes. The amount of the humic substance applied as a component of the products is typically about 3 ounces per acre. The products are intended to promote improved soil health through enhancement of the soil biology, but not as the soil amendment uses listed in the Technical Evaluation report. By comparison the typical crop application rates of the humic acid- alkali extracted liquids range from 1-5 gallons per acre for soils and 1-2 pints per acre for foliar use.

The Crops Committee makes no statement as to the validity of this product or its benefit to organic growers. This discussion is offered in order to show that this particular water extracted humic/fulvic acid available to the marketplace does not represent a functional replacement material for the alkali extracted humic acids.

Further comments are welcomed by the Committee as to the availability of any water extracted humic acids that may be functionally equivalent, wholly natural, substitutes for the alkali extract materials.

## **IV. Committee Recommendation:**

Recommendations based on comments received- 205.601(j)

The Crops Committee recommends the renewal of the following substances in this use category:

(3) Humic acids- naturally occurring deposits, water and alkali extracts only.

Motion: Jeff Moyer Second: Kevin Engelbert

Committee vote: 3-1 Absent- Ostiguy Board vote: